

MNTeSIG Program Agenda

Hyatt Regency Hotel, Parkview Room

<https://www.mntesig.net/>

Draft as of July 12, 2019

7:00-8:00 - Check-in if you have not done so, at the HI-TEC registration desk.

7:00-8:00 - Poster setup, *see Poster Committee members for assistance.*

7:45-8:25 - Continental Breakfast – Grand D Foyer - *Bring coffee with you to the MNTeSIG meeting room.*

8:30-9:00 - Welcome, acknowledge committees, & Introductions, review of the asset book.

9:00 – 9:45 Keynote

Micro – Nano and the Emerging Sensor Based Economy

Todd Christenson, Ph.D.

CTO, co-Founder & Chairman Emeritus, HT MicroAnalytical Inc.

Few emerging technologies have impacted the world as broadly as the micro-nano field. Enabling to many breakthroughs which are providing ‘abundance’ via democratization of communication, healthcare, transportation, food and water access, energy and clean environment the micro-nano field is proving to be central to the betterment of our future. Having worked as an engineer and researcher in the MEMS field for 35 years the speaker will present a view of what appears to be tremendous untapped opportunity to provide further dramatic positive influences on human welfare. Resulting economic and job growth impact will be discussed and the skillsets required to surmount the challenges in meeting this growth will be outlined.

10:00 – 10:30 Break- Posters available for viewing, Grand D Foyer

10:30 – 11:00 - Lightning Round #1: **Moderator - TBN**

Presentations are strictly limited to 7 minutes each

1	Tony Dalessio	SUNY Erie Community College	Micro-credentials, a life preserver for drowning nano programs?
2	Elena Brewer	SUNY-Erie Community College	Lessons Learned from a Collaboration with Normandale Community College
3	Marco Curreli	Omni Nano	Digital Curricula and Textbook for Online and Hybrid Nanotechnology Courses
4	Jared Ashcroft	Pasadena City College	Combined Fundamental Science and Nanotechnology OER Laboratory Manual

11:15-noon – Lightning Round #2: Moderator - TBN

Presentations are strictly limited to 7 minutes each

5	Zekaria Besir	Pasadena City College	Effectiveness on Nano-based Undergraduate Research in Increasing Student Success
6	Ahmed Khan	IEEE/WL/NSU	In Quest of Universal Nanotechnology Standards
7	Salahuddin Qazi	SUNY, NY	Online Visualization and Simulation Tools for Nanotechnology Education
8			

12:00 – 1:00 Lunch – Park View

1:00 – 1:30 Overview of National Center proposal: Jared Ashcroft

1:30 – 2:30 MNTeSIG moving forward, needs, objectives, activities, measurable outcomes

- Curriculum Development
- Faculty Professional Development
- Outreach and program building, include student input
- Industry involvement
- Growing MNTeSIG community
- Other

2:30 – 3:00 Report of the working groups; how do we move it forward?

- Needs, activities to address needs, outcomes anticipated
- Who, what, when?

3:00 – 3:15 Break – Park View

3:15 – 4:00 Keynote

The Quantum Industry Needs a Skilled Workforce—And Soon
Celia Merzbacher, Associate Director, Quantum Economic Development Consortium

The Quantum Economic Development Consortium (QED-C) is an industry consortium, supported by government, with the mission of enabling a robust U.S. quantum industry, including growing the workforce. Advances in quantum information science and technology (QIST) have broad applications—for sensing, communications, and computing. Companies across the supply chain expect to grow but the pipeline of talent at all levels, from technician to post-doctoral, is insufficient. The type of companies that are part of the quantum industry, as well as the QIST workforce needs will be presented.

4:00 – 4:15 Time for Evaluation (Paper or Plastic)

4:15-4:30 Wrap Up - Feedback – Be ready to be called on!

Accepted Posters

Ahmed	Kamal	Tennessee Tech University	Bio Nano Device for Assessment of autonomic Function of Alzheimer's Disease
Yawen	Li	Lawrence Technological University	Nanotechnology Minor Program at Lawrence Technological University
Zekaria	Beshir	Pasadena City College	Active Learning Interdisciplinary Nano-Education Butterfly Lab
Vanessa	Wolf	Pasadena City College	The Role of Remote Access Technology in S*T*EM Education
Nancy	Louwagie	Normandale Community College	Pathways to "and through" a Vacuum Technician Education
Elena	Brewer	SUNY-Erie	Addition of a New Plasma Course to EET Program
Elwin	Cheung	Pasadena City College	Increasing Student Success in STEM Using Active Learning Pedagogy
Pallavi	Sharma	University of New Mexico	Bi-Morph Cantilever – Understanding Micro Sensors and Actuators

